Xanadu Light: The Managed Unit and Its Table

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THE THREAT OF COMPLEXITY

The different types of data-- harpoons, link tables, etc.-- suggest an alarming complexity.

I believe this danger can be overcome by reducing all document management to a single table, repeated in various ways to manage the different units of the system, including single incoming links and transclusions (harpoons). It will manage the different units in the same way.

This table is intended to manage documents, harpoons, barnacles, Xanamail and other units not yet invented.

A better term will come along, but let us call this for the time being the Managed-Unit Table.

EFFICIENCY LATER

The real issue is clean design. We can worry about efficiency later.

ÜBER-TABLE OF UNITS

Presumably there will be an overall table of Managed Units, which will state for each unit:

- Native to this node?
- Owner
- Publisher, if any
- Sponsor
- Royalty Recipient
- Expiration date of current payment

Independence of unit
- independent
- attached
    - harpoon (inbound)
    - barnacle (outbound)

Completeness of unit
- whole unit
- virtual subunit

THE MANAGED-UNIT TABLE: TWO TYPES OF ENTRIES

I suggest that the unit's table be able to contain two types of entries: the piece or segment, and the link.

This may or may not be good database form, but I think lends some clarity. The link spans refer to the virtual addresses of the pieces; therefore they are closely related.

They can of course be separated.

PIECES (or SEGMENTS)

A piece should know, in its row:

Piece number in this document

Its address in the network (canonical)

Auspices (same as link)
- Owner (copyright holder)
  (May not be known if not on Xanadu system)
- Publisher
  (May not be known if not on Xanadu system)
- Sponsor
  (May not be known if not on Xanadu system)
- Basis of availability
  (May not be known if not on Xanadu system)

Native to this document? (same as link)
- Yes
- No (transcluded)

Its address span in the document
  Starting byte number in this document
  Ending byte number in this document

LINKS

A link should know, in its row:

Auspices (same as piece)

- Owner (copyright holder)
  (May not be known if not on Xanadu system)
- Publisher
  (May not be known if not on Xanadu system)
- Sponsor
  (May not be known if not on Xanadu system)
- Basis of availability
  (May not be known if not on Xanadu system)

Its link number in this document

Native to this document? (same as piece)

- Yes
- No (transcluded)

Left Endset Coupling Type

- text span
- rectangle on screen
- (coordinate spaces and other couplings to be added to design later)

Left Endset
Parameters

(optional: Right Endset Coupling Type)

- text span
- rectangle on screen
- (coordinate spaces and other couplings to be added to design later)

(optional: Right Endset)
Parameters